AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A hydrodynamic bearing, comprising:

a column-like shaft;

a hollow cylindrical sleeve being fitted on an outer circumferential surface of said shaft so as to achieve relative rotation among the two; and

a thrust plate being directly or indirectly attached to or integrated with either one of said shaft and said sleeve, which thrust plate being faced with a plane formed at one end of the other one of said shaft and said sleeve perpendicular to an axis of said bearing,

wherein hydrodynamic pressure in a radial direction being generated at a radial bearing portion formed by an outer circumferential surface of said shaft and an inner circumferential surface of said sleeve, and hydrodynamic pressure in a thrust direction being generated at a thrust bearing portion formed by said thrust plate and said plane which is faced with said thrust plate and formed at said one end of said other member perpendicular to said axis,

the hydrodynamic bearing is characterized in that either one of the surfaces forming said radial bearing portion is provided with a groove or grooves ~~which~~ configured to generate a force in a thrust direction via a fluid located in the radial bearing portion so as to ~~make~~ cause an axial movement of either one of the shaft and the sleeve through relative rotation therebetween, said relative rotation being in a direction that causes axial movement of the sleeve or the shaft in a direction that reduces a gap between the two facing members at said thrust bearing portion ~~make the two facing members at said thrust bearing portion closer to each other~~, and

either one of the surfaces of said two facing members at said thrust bearing portion is provided with a groove or grooves which generate hydrodynamic pressure in said thrust direction.

2. (Currently Amended) The hydrodynamic bearing of claim 1, wherein said groove formed in said radial bearing portion is either a groove inclined with respect to said bearing axis, or a herringbone-shaped groove whose apex is displaced from the center of the groove in the axial direction so as to generate said force in thrust direction when the hydrodynamic bearing is rotated.

3. (Previously Presented) The hydrodynamic bearing of claim 1, wherein an upstream side of said radial bearing portion is shielded against outside atmosphere, and
a resultant negative pressure developed in the vicinity of said upstream side of said radial bearing portion is utilized for enhancing said force in a thrust direction of bringing the two facing members forming said thrust bearing portion closer to each other.

4. (Previously Presented) The hydrodynamic bearing of claim 1, wherein the radial bearing portion connected with outside atmosphere and the thrust bearing portion connected with outside atmosphere are formed contiguous to each other, and utilize gas introduced at said radial bearing portion for a thrust pressure at said thrust bearing portion, whereby said groove(s) (6) for generating the hydrodynamic pressure at said thrust bearing portion is eliminated.

5. (Previously Presented) The hydrodynamic bearing of claim 1, wherein the hydrodynamic bearing is structured as a shaft-rotation type.

6. (Previously Presented) A spindle motor comprising the hydrodynamic bearing of claim 1.

7. (New) A hydrodynamic bearing of claim 1, wherein a through-hole is formed in either said thrust plate or a cover plate covering the sleeve at the opposite side of the thrust plate with respect to the shaft to permit fluid communication between inside of the thrust bearing portion and outside atmosphere, said through-hole is configured to partially or fully eliminate development of a pressure acting against said force in said thrust direction.

REMARKS

In the Response to Arguments section of the Office Action, (see page 4), the Examiner contends that **Kloeppel** teaches that the groove or grooves in the radial bearing portion generate a force in a thrust direction, which forces the members of the thrust bearing portion closer to one another, as recited in claim 1.

The Examiner alleges that **Kloeppel** "discloses a spindle motor (21, column 4, line 35) comprising a hollow cylindrical sleeve (54) being fitted on an outer circumferential surface of said shaft, a thrust plate (52), being directly or indirectly attached to or integrated with either one of the shaft and sleeve which thrust plate being faced with a plane formed at one end of the other one of the shaft and said sleeve perpendicular to an axis of said bearing (Fig. 2), wherein hydrodynamic pressure in a radial direction is generated at a radial bearing portion formed by an outer circumferential surface [*sic: of*] said shaft [*sic: and*] an inner circumferential surface of the sleeve (Fig. 2)". The Examiner further alleges that **Kloeppel** discloses "hydrodynamic pressure in a thrust direction is generated at a thrust bearing portion formed by said thrust plate and formed at said one end of said other member perpendicular to said axis (Fig. 2), the hydrodynamic bearing is characterized in that either one of the surfaces forming said radial bearing portion is provided with a groove or grooves (column 5 line 21) witch *[sic: which]* generate a force in a thrust direction".

The invention of claims 1-3, 5 and 6 relates to a hydrodynamic bearing having a radial bearing portion and a thrust bearing portion, wherein either one of the surfaces forming said radial bearing portion is provided with a groove or grooves (7) configured to generate a force in a thrust direction. This force is achieved by means of a fluid located in the radial bearing portion which causes an axial movement of either one of the shaft and the sleeve through relative rotation among each other, said relative rotation being in a direction such that said axial

movement of the sleeve or the shaft *reduces a gap* between the two facing members at said thrust bearing portion (amended claim 1). The urging force in the thrust direction is generated in the radial bearing portion so as to reduce the gap between the two members forming the thrust bearing portion, which urging force is balanced by the hydrodynamic pressure generated in the thrust bearing portion. This balancing condition create enhanced thrust rigidity, which in turn reduces variation in thrust position (line 1 to 12 of page 7 of the present specification).

For the purpose of generating the thrust force for reducing the gap between the two members in the thrust bearing portion, the groove(s) formed in the radial bearing portion are inclined with respect to the axis of the bearing in a direction in which the urging force may be generated by means of screw effect when the rotational member is rotated (line 8 of page 11 to line 2 of page 12 of the present specification). A herringbone-shaped groove performing a similar effect by having asymmetric configuration may also be formed (line 24 of page 21 to line 19 of page 22, and Figs. 5 and 6). In the present invention, rotation direction of the bearing is important in order to create a thrust force by the screw effect in a desired direction by means of such inclined spiral groove(s) or asymmetric herringbone groove(s).

A. THE 35 U.S.C. § 102 REJECTION

Claims 1-3, 5 and 6 are again being rejected under 35 U.S.C. § 102 as being anticipated by **Kloeppel** ('703). Reconsideration and withdrawal of this rejection is requested.

To sustain the anticipation rejection of claims 1-3, 5 and 6, the Examiner must show that **Kloeppel** expressly or inherently identically teaches each and every aspect of the claimed invention. The factual determination of lack of novelty under 35 U.S.C. §102 requires the identical disclosure in a single reference of each element of a claimed invention such that the identically claimed invention is placed into the recognized possession of one having ordinary

skill in the art. *Helifix Ltd. v. Blok-Lok, Ltd*, 208 F.3d 1339 (Fed. Cir. 2000). In accord with the remarks that follow, it is submitted that this burden has not been discharged.

I. KLOEPPEL DOES NOT EXPRESSLY DISCLOSE GROOVE(S) GENERATING A FORCE IN A THRUST DIRECTION

To sustain the anticipation rejection of claims 1-3, 5 and 6, the Examiner must show that **Kloeppel** expressly or inherently identically teaches each and every aspect of the claimed invention. The factual determination of lack of novelty under 35 U.S.C. §102 requires the identical disclosure in a single reference of each element of a claimed invention such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Helifix Ltd. v. Blok-Lok, Ltd*, 208 F.3d 1339 (Fed. Cir. 2000).

The Examiner alleges that **Kloeppel** discloses "hydrodynamic pressure in a thrust direction is generated at a thrust bearing portion formed by said thrust plate and formed at said one end of said other member perpendicular to said axis (Fig. 2), the hydrodynamic bearing is characterized in that either one of the surfaces forming said radial bearing portion is provided with a groove or grooves (column 5 line 21) witch *[sic: which]* generate a force in a thrust direction". This assertion is unfounded.

Kloeppel discloses a hydrodynamic bearing wherein a shaft, rather than a sleeve, is rotated, thereby reducing weight of rotating elements, and minimizing power consumption (line 39-43 in column 3). In such a configuration, the shaft 80 and thrust plate 81 are supported by fluid (gas or liquid) between the surface of the shaft and thrust plate, and the corresponding inner surface of sleeve 82 and the counter-plate 84, and these surfaces have patterns or grooves thereon to establish appropriate pressure (column 5, lines 17-24).

However, **Kloeppel** does not describe anything about generating a force in a thrust direction by means of groove(s) provided in the radial bearing portion. **Kloeppel** only describes

that these grooves are provided to establish appropriate pressures in the fluid (col. 5, lines 21 and 22). In general, hydrodynamic pressure established in the radial bearing portion generates a force in radial direction and the hydrodynamic pressure established in the thrust bearing portion generates a force in thrust direction, thereby supporting the shaft and the thrust plate (see 80 and 81 in **Kloeppel**). Hydrodynamic pressure in the radial bearing portion does not generate a force in thrust direction, nor does the hydrodynamic pressure in the thrust bearing portion generate a force in radial direction.

Moreover, the hydrodynamic pressure established in **Kloppel's** thrust bearing portion (e.g., thrust plate 81 and counter-plate 84) always generates a force to pull apart the two facing components forming the thrust bearing portion for the purpose of supporting the thrust plate (81). **Kloeppel** expressly teaches that shaft 80 and thrust plate 81 are "supported for rotation" by fluid between surfaces of the shaft and thrust plate, wherein the hydrodynamic grooves' function is to "establish appropriate pressures in the fluid and support the shaft for rotation" (col. 5, lines 21-23). As shown in Fig. 3, the direction in which the shaft would be "supported for rotation" would be the same direction in which the thrust plate 81 would be moved *away from* grooved surface 89.

Kloeppel fails to disclose the claimed groove or grooves *in the radial bearing portion* that generate a force in a thrust direction (i.e., a direction which forces the members of the thrust bearing portion closer to one another)(*see, e.g.*, page 9, lines 7-9 of Applicant's disclosure. It is known in the art that providing some form of groove(s) in the radial bearing portion facilitate generation of hydrodynamic pressure in radial direction. For example, even groove(s) in the radial bearing portion formed parallel to the bearing axis may develop the similar effect. However, such groove(s) do not generate a force in a thrust direction to move either one of the shaft and the sleeve forming the radial bearing portion. **Kloppel** does not describe anything

remotely resembling a teaching (or suggestion) of generating a force in thrust direction by means of hydrodynamic pressure established in the radial bearing portion. Accordingly, the Examiner's contention that "either one of the surfaces fanning said radial bearing portion is provided with a groove or grooves which generate a force in a thrust direction" (emphasis added)(see sentence bridging pages 2 and 3 of the May 7, 2003 Office Action) finds no basis in **Kloeppel**.

II. KLOEPPEL DOES NOT INHERENTLY DISCLOSE GROOVE(S) GENERATING A FORCE IN A THRUST DIRECTION

The Examiner states that **Kloeppel's** radial bearing portion grooves "generate a force in a thrust direction." However, **Kloeppel** does not support this asserted teaching. Instead, **Kloeppel** generally refers to the fluid dynamic thrust bearing as "supporting the shaft 80 for rotation" (col. 5, line 13). **Kloppel** is, in fact, silent as to the rotation direction of the bearing.

Claim 1 requires, for example, a "hydrodynamic bearing is characterized in that either one of the surfaces forming said radial bearing portion is provided with a groove or grooves configured to generate a force in a thrust direction via a fluid located in the radial bearing portion so as to cause an axial movement of either one of the shaft and the sleeve through relative rotation therebetween, said relative rotation being in a direction that causes axial movement of the sleeve or the shaft in a direction that reduces a gap between the two facing members at said thrust bearing portion" (emphasis added). The direction of the rotation is set to move either the sleeve or the shaft in a direction *reducing* the gap between the two facing members at the thrust bearing portion (*see, e.g.*, page 11, line 8 to page 12, line 2). By such groove configuration, in combination with the claimed rotational motion, the groove(s) of the present invention may generate a thrust force to reduce the gap in the thrust bearing portion.

Thus, although the depicted pattern of grooves in **Kloppel**, Fig. 3, superficially appear to be of the same orientation as that depicted in Fig. 4 of the Applicants' disclosure, **Kloeppel** is

silent as to rotational direction, which affects the direction of the force imparted to the rotating components. In view of this silence, **Kloeppel** cannot be said to inherently teach the claimed rotational direction. The fact that a certain result or characteristic (e.g., a preferred rotational direction) *may* occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. Instead, to establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the references, and that it would be so recognized by persons of ordinary skill". *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). Such extrinsic evidence showing the necessary presence of the aforementioned features has not been produced.

The mere existence of two possible outcomes (i.e., clockwise rotation or counter-clockwise rotation) mandates a conclusion that inherency cannot be established. "Inherency may not be established by probabilities or possibilities." *See In re Oelrich et al.*, 212 USPQ 323, 326 (CCPA 1981); *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); *Continental Can Co. v. Monsanto Co.*, 20 USPQ2d 1746, 1749-50 (Fed. Cir. 1991) ("Inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.").

Kloeppel accordingly does not identically teach, explicitly or implicitly, the claimed invention and fails to substantiate the Examiner's alleged anticipatory rejection under 35 U.S.C. § 102(b) over claims 1-3, 5 and 6. Withdrawal of this rejection is requested.

B. THE 35 U.S.C. § 103 REJECTION

Claim 4 is again being rejected under 35 U.S.C. § 103 as being unpatentable over **Kloeppel** in view of **Ichiyama** ('454). This rejection is again traversed as being legally improper and factually unsupported.

The Examiner alleges that it would have been obvious to "modify **Kloeppel '703** hydrodynamic bearing with herring-bone-shape grooves and having portion of the bearing connected to the outside atmosphere witch *[sic: which]* was taught by **Ichiyama 6,034,454** to generate a pressure with *[sic: which]* lifts up the sleeve and thrust plate from the top portion of the shaft with more efficiency."

1. EACH AND EVERY ELEMENT IS NOT TAUGHT OR SUGGESTED

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970); *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995). As discussed both *infra* and *supra*, the factual predicate necessary to establish and support an obviousness rejection under 35 U.S.C. § 103(a) has not been established.

For the reasons stated above, detail of which is omitted herein for brevity, **Kloeppel** teaches shaft 80 and thrust plate 81 are supported for rotation by fluid between surfaces of the shaft and thrust plate and the hydrodynamic grooves only "establish appropriate pressures in the fluid and support the shaft for rotation" (col. 5, lines 17-23). As shown in Fig. 3 of **Kloeppel**, the direction in which the shaft would be "supported for rotation" would be the same direction in which the thrust plate 81 would be moved *away from* grooved surface 89, contrary to independent claim 1 and dependent claim 4.

Ichiyama is unable to make up for this deficiency in the teachings of **Kloeppel**. **Ichiyama** discloses a hydrodynamic bearing having herringbone grooves 13 in the upper side of the radial bearing portion, as well as spiral grooves 14 in a lower side (Fig. 2a). The spiral grooves 14 are formed for the purpose of drawing the fluid downwardly during rotation of the shaft 2 to increase hydrodynamic pressure in the thrust bearing portion 19 together with the pressure generated by the spiral grooves 15 formed in the thrust bearing portion 19. The spiral

grooves 14 thus enhance hydrodynamic pressure in the thrust bearing portion 19 by drawing a fluid into the thrust bearing portion 19 when the shaft 14 is rotated (column 8, lines 5-18). This increased hydrodynamic pressure is balanced with an urging force due to a magnetic bias shown by an arrow A in Fig. 1 (col. 8, lines 19-24). Because of this magnetic urging force, a thrust bearing portion for supporting a shaft 2 upwardly during rotation is not provided in the bearing of **Ichiyama** (col. 8, lines 53-58; Figs. 1-4).

When the spiral grooves 14, as shown in Fig. 2a of the **Ichiyama**, are provided on inner surface of the sleeve 4, the shaft 2 to be inserted in the sleeve 4 (see Fig. 1) should be rotated counter-clockwise when viewed from an upper side of the drawing. Fluid 6 existing in the radial bearing portion is drawn downwardly toward the thrust bearing portion 19 by this counter-clockwise rotation. This fluid may be used for increasing hydrodynamic pressure in the thrust bearing portion. During rotation, the shaft 2 is also urged downwardly because of a screw effect of the spiral grooves 14. However, even though the shaft 2 is urged downwardly, the gap between the members forming the thrust bearing portion is not reduced, in contrast to that of the present invention, because the spiral grooves are not formed at an underside of the thrust plate 3 (col. 8, line 53-58) in this hydrodynamic bearing. Since the grooves 15 are formed on the upper side of the thrust plate 3 of **Ichiyama**, the downward movement of the shaft 2 increases the gap in the thrust bearing portion of this bearing, which is in a completely opposite direction to that of the claimed invention.

Fig. 5 of **Ichiyama** shows a hydrodynamic bearing having grooves 60 in the radial bearing portion as well as grooves 60 on both side of the thrust plate 56. In this example, however, the grooves 60 formed in the radial bearing portion are herring-bone grooves (column 2, line 13), which are used for generating radial hydrodynamic pressure only, and are not designed to generate an urging force for narrowing the gap in the thrust bearing portion.

Whereas **Ichiyama** guides fluid in the radial bearing portion toward the thrust bearing portion by means of the spiral grooves 14, the present invention intends to enhance thrust rigidity by reducing the gap in the thrust bearing portion by means of screw effect created by the spiral grooves formed in the radial bearing portion. Fig. 4 of Applicants' disclosure shows a hydrodynamic bearing in which the shaft rotates. The shaft 2 is provided with spiral grooves 7 inclined in a left handed direction. When the shaft 2 rotates in the counterclockwise direction, the shaft 2 is urged downwardly in the drawing by the screw effect of the spiral grooves 7, which in turn reduces the gap in the thrust bearing portion, whereby enhanced thrust rigidity is achieved. In this particular condition, fluid located in the radial bearing portion in drawn upwardly (away from the thrust bearing portion) by the effect of the spiral grooves 7, which is in a completely opposite direction to that intended by **Ichiyama** (in which the fluid needs to guided toward thrust bearing portion downwardly located). Thus, the present invention differs from **Ichiyama** in terms of structure, operation and working effect.

With respect to the herringbone-shaped grooves 13, **Ichiyama** teaches merely "a plurality of V-like grooves formed, with each V-like groove consisting of two spiral grooves 13a and 13b arranged in mutually opposite directions" (column 6, lines 15-19). This would not suggest to a person of ordinary skill in the art generation of a force in thrust direction. In fact, a person of ordinary skill would conclude that the herringbone-shaped groove of **Ichiyama** Fig. 2a are configured to generate a force only in radial direction (see, also col. 6, lines 34-41) and cannot generate any force in thrust direction, since the shown herringbone-shaped groove is formed symmetrically in axial direction.

Moreover, **Ichiyama** is silent about rotation direction of the bearing and even if **Ichiyama** was formed with a herringbone-shaped groove in a different configuration (which is not suggested), such as asymmetric type, it may not generate a force in a desired thrust direction

when the rotation direction is not determined properly. **Ichiyama** describes that "When the rotational shaft body 3 is rotating, a lubricant fluid 6 will flow from both sides toward a tip portion 13c of each herring-bone groove, thereby producing the desired dynamic pressure," (column 6, lines 19-22). According to this description, it may be considered that rotation of the bearing shown in Fig. 2a of **Ichiyama** is in counter-clockwise direction when viewed from the top of the bearing. If the bearing (or the shaft body 3, in this case) rotates in this direction, the shaft body 3 would be moved, by screw effect made by spiral grooves 14, to the direction opposite to the direction shown by the arrow A in Fig. 1, which movement increases the gap of two components forming the thrust bearing portion (thrust plate 3 and thrust bearing section 19). This movement and resulting gap are opposite to that required by the present invention.

Contrary to **Ichiyama**, the specification of the present invention specifically describes that the herringbone-shaped groove is formed in such a manner that the location of the apex is displaced from the axial center of the bearing portion, and that the direction of the rotation is determined to move either the sleeve or the shaft in a direction to reduce a gap between the two facing members at the thrust bearing portion (see, e.g., page 22, lines 15-19). By means of such configuration of the groove as well as rotation direction, the herringbone-shaped groove *of* the present invention may eventually generate a thrust force to reduce the gap in the thrust bearing portion.

Accordingly, one skilled in the art would not miraculously arrive at the unique combination of features claimed by the present invention, simply by combination of the disclosures of **Ichiyama** and **Kloeppel** in manners consistent with the teachings and suggestions therein. Moreover, in the instant case, the combination of **Kloeppel** and **Ichiyama** has not been shown to teach or suggest the claimed combination of elements including, *inter alia*, a hydrodynamic bearing wherein "either one of the surfaces forming said radial bearing portion is

provided with a groove or grooves configured to generate a force in a thrust direction via a fluid located in the radial bearing portion so as to cause an axial movement of either one of the shaft and the sleeve through relative rotation therebetween, said relative rotation being in a direction that causes axial movement of the sleeve or the shaft in a direction that reduces a gap between the two facing members at said thrust bearing portion".

Moreover, as described above, it should be noted that, when comparing the present invention with any of the prior art documents, such as **Kloeppel** or **Ichiyama**, the screw effect created by the claimed groove(s) of the present invention and the effect of drawing a fluid made by the groove(s) are completely different phenomena, and these two effects should not be confused. Neither **Kloeppel** nor **Ichiyama** teach or suggest anything about a structure configured to utilize the unique screw effect including groove(s) formed in the radial bearing portion to thereby enhance rigidity in thrust direction.

It is not the prior art of record, but rather the Applicants' own specification that teaches these features and combinations of features. As emphasized throughout the Manual of Patent Examining Procedure, the prior art references applied must teach or suggest all the claim limitations. MPEP §§706.02(j); 2142; 2143; 2143.03. If the references fail to do so, a *prima facie* case of obviousness is not established. Clearly, therefore, under the correct standard of obviousness, as reflected in the above MPEP provisions, the Examiner has failed to establish *prima facie* obviousness of the claimed invention. Even under the Examiner's view of the prior art, neither **Kloeppel** nor **Ichiyama**, alone or in combination, teaches or suggests the claim limitations emphasized above.

Reconsideration and withdrawal of this 35 U.S.C. § 103(a) rejection is requested.

2. EXAMINER'S BURDEN OF PROOF HAS NOT BEEN DISCHARGED

The ultimate determination on patentability is made on the entire record. *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). As part of this determination, Examiners are to consider

all rebuttal arguments and evidence presented by Applicants. *See, e.g., In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995); *In re Alton*, 76 F.3d 1168 (Fed. Cir. 1996). "A determination under 35 U.S.C. § 103 should rest on all evidence and should not be influenced by any earlier conclusion." *See, e.g., In re Piasecki*, 745 F.2d 1468, 1474 (Fed. Cir. 1984).

"When an applicant submits evidence traversing a rejection, the examiner **must** reconsider the patentability of the claimed invention. The ultimate determination of patentability **must** be based on consideration of the entire record, by a preponderance of the evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence". See, e.g., MPEP § 716.01(d)(emphasis added). "Facts established by rebuttal evidence **must** be evaluated along with the facts on which the conclusion of a prima facie case was reached, not against the conclusion itself." *In re Eli Lilly*, 902 F.2d 943 (Fed. Cir. 1990)(emphasis added).

In the Request for Reconsideration filed September 13, 2002, Applicants presented extensive technical remarks distinguishing the structure and operation of the invention from that of the applied prior art, taken singly and in combination.

BOTH of the Examiner's "Response to Arguments" presented in the Final Office Action (Paper No. 14, Page 4) and the Examiner's May 7, 2003 rejection assert that the technical remarks regarding the claimed invention "*are not persuasive, since the rejections of the claimed inventions are based on claim limitations*" (emphasis added). Despite Applicants' earnest and extensive efforts to highlight the differences between the claimed invention and the applied references, the Examiner still takes the position that the claim limitations were not argued and that the Applicants were arguing features not claimed. This is clearly not the case.

For example, the Request for Reconsideration discusses, on the paragraph bridging pages 2 and 3 and the first full paragraph on page 3, the failure of **Kloeppel** to teach or suggest *claimed subject matter*. The Request for Reconsideration also discusses, on the first full paragraph on

page 6, the failure of **Ichiyama** to teach or suggest *claimed subject matter*. Additional examples are replete but are otherwise omitted for brevity.

"Wherever the evidence is insufficient to overcome the rejection, the examiner must specifically explain why the evidence is insufficient. General statements such as . . . 'the scope of the evidence is not commensurate with the scope of the claims' without an explanation supporting such findings are insufficient". MPEP § 716.01 (emphasis added).

The Examiner's May 7, 2003 rejection again failed to specifically explain why the evidence is insufficient.

In view of the above, the Examiner has failed to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), for at least the above reason, as the Examiner has not considered the record in its entirety in arriving at the conclusion of obviousness or has not provided evidence of such consideration.

The Examiner's rebuttal, comprising a reassertion of alleged obviousness under 35 U.S.C. § 103, is lacking in premise or basis in the record as a whole, as it improperly dismisses the substance of the Applicants' rebuttal evidence of both the Requests for Reconsideration filed on September 13, 2002 and February 20, 2003, draws conclusions not permitted by the facts of record, and fails to provide explanation of such conclusions.

Withdrawal of this 35 U.S.C. § 103 rejection is requested for at least this reason.

C. ALLOWANCE IS REQUESTED

"If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *In re Oetiker* 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)(*citations omitted*).

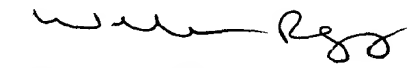
It is submitted that claims 1-6 are presently in condition for allowance as no *prima facie* case of anticipation, obviousness, or claim deficiency has been established with respect to any statutory provision of 35 U.S.C. §§ 102, 103, or 112, respectively.

It is further submitted that new claim 7 is also allowable based at least upon its dependency from claim 1. This claim adds thereto a through hole in the thrust bearing portion for exhausting a fluid drawn into the thrust bearing portion to outside atmosphere, thereby permitting the two components in the thrust bearing portion to become closer. Disclosure of this feature is provided, for example, at page 15, lines 6-17 and Fig. 2, as well as from page 17, line 21 to page 18, line 5 and Fig. 3.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY



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